Claims

1. A method for determining if an item is a fraudulent item, the method comprising the steps of:

obtaining a first number associated with the item or item's packaging;

obtaining a second number associated with the item or item's packaging;

utilizing a cryptographic process and the first number to cryptographically verify the second number; and

determining the product's authenticity based on the verification.

2. The method of claim 1 wherein the step of obtaining the fist number comprises the step of obtaining the first number from an RFID tag associated with the item or the item's packaging.

3. The method of claim 1 wherein the step of obtaining the second number comprises the step of determining a cryptographic signature printed on the item or the item's packaging.

4. The method of claim 1 wherein the step of utilizing the cryptographic process comprises the step of utilizing a public key and the first number to verify the second number.

5. The method of claim 1 wherein the step of determining the products authenticity comprises the step of associating the product with an authentic product if the signature is verified, otherwise associating the product with a forged product.

6. A method of manufacturing a product in order to prevent forgery, the method comprising the steps of:

obtaining a tag comprising a first number;

determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity;

affixing the first number to either the product or the packaging associated with the product; and

affixing the second number to either the product or the packaging associated with the product.

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7. The method of claim 6 wherein the step of obtaining the tag comprising the first number comprises the step of obtaining an RFID tag comprising a unique, or semi-unique unalterable number.

10   8. The method of claim 6 wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging.

9. The method of claim 6 wherein the step of determining the second number utilizing
15   the first number and a cryptographic process comprises the step of utilizing the first number and a private key to generate the second number.

10. A method comprising the steps of:
 obtaining a first number from an RFID tag associated with an item;
20   obtaining a second number printed on the item or the item's packaging;
 utilizing a public key and the first number to verify the second number; and
 determining the item's authenticity based on the verification.

11. A method comprising the steps of:
25   obtaining an RFID tag comprising a first number;
 utilizing a private key and the first number to create a second number such that cryptographic verification of the second number insures a product's authenticity; and

 affixing the second number and the RFID tag to the item or the item's
30   packaging.

12. An RFID tag comprising:

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a first portion comprising product identification information; and

a second portion comprising an unalterable random or semi-random number, wherein the unalterable random or semi-random number is utilized along with a cryptographic signature to verify a products authenticity.

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13. The RFID tag of claim 12 wherein the first portion comprises a product code or a serial number or a manufacturer code.

14. The RFID tag of claim 12 further comprising the cryptographic signature.

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15. A product scanner comprising:

an RF tag reader outputting contents of an RF tag;

a scanner outputting a cryptographic signature; and

logic circuitry having the contents of the RF tag and the cryptographic

15   signature as an input and outputting information as to whether an item is a forgery.

16. The product scanner of claim 15 wherein the logic circuitry utilizes a public key and cryptographic operations to verify the cryptographic signature.

20   17. An apparatus comprising:

an RF reader outputting contents of an RF tag;

logic circuitry having the contents of the RF tag as an input and outputting a cryptographic signature; and

printing circuitry having the cryptographic signature as an input and printing

25   the cryptographic signature upon an item or packaging.

18. The apparatus of claim 17 further comprising:

an RF writer outputting product information for the item to the RF tag.